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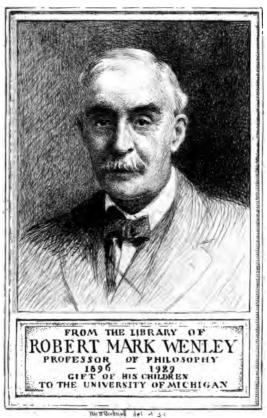
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MOTIVES IN EDUCATION D.F.K.BERTOLETTE



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AND OTHER ESSAYS

D. F. K. BERTOLETTE



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1916

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MOTIVES IN EDUCATION 11 Section

MOTIVE may be defined as meaning that which acts as an inducement to preference or choice.

In other words it is a very strong influence toward some object to be attained. Just what these influences are depends entirely upon the nature of the person and on the object to be attained. We often hear the expression, and doubtless use it as often ourselves, "What was your motive in doing this?" meaning what caused you or what influenced you to act in such a manner.

We may state with truth that every wilful act has its inducement or cause.

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Just as in mathematics there is a reason for every step, so also in every act there is a motive or cause. From the child on up the individual can give a reason for each and every one of his voluntary acts however small and mean the reason may be. Still it is a reason. It may only be a certain state of consciousness which happens to be uppermost in a man's mind as he acts.

Very often Intention and Motive are confused; in fact they are used interchangeably in society. Notwithstanding this fact there is a vast difference in their meaning. Intention is what a man means to do, while Motive is the personal frame of mind which indicates why he means to do it. Therefore Intention has the stronger moral value, while Motive renders the consequences interesting and at-

tractive. Motive is that which makes the difference between one act and another.

As we now know the difference between Intention and Motive, let us examine the different kinds of Motives. Motive may be divided into two classes, Egoistical and Altruistical. Both classes are absolutely necessary in our daily life. Let us first look at egoistic motives or the ones which concern the self only. Our original instincts are such that their objects are to look after the advantages of the self. However everything depends upon the sort of self maintained. What would become of a person if he would not struggle for food and strive against obstacles? What would become of society? Self-preserving instincts must be therefore socially conservative. No one has a right to neglect his own interests, hoping

some one else will care for them. The man who takes exercise because he thinks of his health must be commended, but the one who is thinking continually of his health and excludes other thoughts must be condemned.

Altruistic motives are called out by the sight of another's joy or sorrow and seek to increase the former and lighten the latter. These motives may be divided into three classes: 1. Those which seek to preserve the self. 2. Those which seek to favor others. 3. Those which are purely impersonal. Every person is a peculiar mixture of fierce insistence on his own welfare and is susceptible to the happiness of others.

I have said that the motives of a person are either egoistical or altruistical and this applies to the child as well as to the adult.

Both classes are absolutely necessary, as we have seen, but it remains for us to teach the child when and how to use the one in exclusion of the other; in other words, give him training for future life. Coming down to the main question, is there any motive in education? Is there any influence which causes any person young or old to study? Let us pause a moment and consider. Beyond a doubt we all have pupils in our schools who do not study well and possibly some who do not study at all. Somehow or other they simply idle their time away. What is the reason? What can be done to solve this great problem? This is a question which has confronted teachers and parents from time immemorial. We all know through personal experience how difficult it is to do anything which is not interesting. We

also know that the results are better and more lasting where interest is displayed. The same thing is true with the child in his education. To say that one is interested in a subject is exactly the same as saying that he has a motive for its study. As we have seen, one may have other motives than that of interest, yet interest in its best sense means motive and when we succeed in getting a child interested in his work we give him a motive. Therefore the point is for every teacher to make the subject in which a pupil shows no interest interesting and thus give him a motive for his work.

In early times the custom prevailed amongst the majority of teachers to make a subject interesting by use of the rod. This method of securing interest proved too harsh and eventually the only result

obtained was to make the child stubborn. It was also discovered that many pupils had no special interest in avoiding a whipping. Later, demotion and praise were resorted to. These were by far the most pleasant incentives. Although these might produce interest in the school they failed entirely out of school. It was then learned that one should appeal to those values which last all through life. One should therefore appeal to such values as: duty, honesty, ambition, rivalry, and the virtues which last all through life. The kind of interest which is secured in this manner is known as mediate interest, or the kind of interest connected with a thing which is not interesting in itself. The method is known as an appeal to the generic values or interests. In other words, it is the securing of interest where no in-

terest is shown.

In appealing to the virtues the guiding principle is that the highest virtue should be used. By this I mean the highest virtue the pupil can comprehend, and to do this the teacher must know his pupils. He dare not appeal to duty if his pupils are not as yet interested in doing their duty and do not understand the term. An objection to this may be raised that the pupil studies merely for the sake of the virtue and not for the sake of the subject matter. He is interested merely in quantity and not in quality. Here the teacher must again step in. Here the teacher must know in what his pupil is interested and should associate the work along the pupil's line of interest. For example: a boy is not in the least interested in arithmetic, yet he is intensely interested

in farm work. If so, anything connected with farm work will be interesting. In this case it is the duty of the teacher to associate the lessons with farm work and their value to farm work. He should give the boy such problems as are concerned with finding the dimensions of buildings, the capacity of bins, in fact anything of interest to a boy on a farm. At the same time he should point out the need of such problems to a farmer. In such cases invariably interest will be obtained. The work may be slow yet it will be lasting.

Many teachers think attention is the thing needed in classes; however, this is not the most important although it is one of the most important. This is shown by the difference between the listless attention we give to anything uninteresting and the kind of attention we give to any-

thing interesting. Therefore it is the duty of every teacher to make his classes interesting and alive; if he fails the branch should be dropped since the damage will be greater than the benefit.

One great fault with many teachers is constantly to be nagging at our dull pupils—we praise and help our bright pupils only. This should not be done. Some pupils can grasp a lesson quicker than another and it is our duty to explain more to the dull pupil and help him. Any person will get tired of continual scolding, will get disgusted and quit. Many a time a dull mind is the most fertile field to work in if the teacher but knew and would cultivate. A teacher is not measured by the number of bright pupils he makes brighter, but rather by the number of dull pupils he makes bright. The dull

pupil needs the most encouragement. Many of our greatest men were the dullest in their school days. It is true that it may take time and a lot of patience to teach a dull boy, yet the result may be ample reward.

It is the duty, therefore, of every teacher to know his pupils, to find out in what they are interested, to associate the uninteresting with the interesting, and in so doing should appeal to the higher and nobler qualities which may serve to move a pupil.

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THE FRENCH HUGUENOTS IN EARLY FLORIDA



THE FRENCH HUGUENOTS IN EARLY FLORIDA

MONG the various nationalities which gave the New World a start were the French. Of these there were two chief classes: first, those who left their native land of their own accord for the purpose of establishing a "New France" in the New World; second, those compelled, or almost compelled, to leave their country on account of religious persecution. Taken as a whole, we find the latter class, although struggling against greater odds, more numerous than the former and as a rule they were the better element to lay the foundation of a young nation. When

they came they came with a determination to stay, knowing that they could not possibly return unless they would conform to the Established Church. This class was termed the French Huguenots and among them, as in all classes, we find both good and bad, industrious and indolent. They found settlements in nearly every colony and in every case proved themselves a good element. However, looking over our histories, in general, we find that very little attention is given them. Can it be that they were neither beneficial nor interesting? No, this can not be for they were very beneficial and interesting in the extreme. "What then are the reasons that so little is said?" you may ask. In the first place it may be that not much is known about them; in the second place the majority of our historians are Eng-

lishmen and do not care to mention anything concerning the French. Be this as it may, the fact remains that in very few histories, especially those commonly used, do we find any great discussion about the Huguenots' early settlements, scarcely a mere mention. Although unsuccessful in many cases, yet they deserve a place on our records. Therefore, in this treatise, I shall endeavor to enlighten the reader in particular about several of these early settlements, namely, those of the Huguenots in Early Florida.

Let us, first of all, note conditions in France which brought about these settlements. About the year 1562 a dark cloud was thickening over France. The great religious wars were rapidly approaching. At this time the people were getting new religious ideas and were leaving the Es-

tablished Church, which was Catholic. Spain, the great Catholic nation, was continually watching and waiting to crush this hope of humanity. Considering these facts and fearing what the future might have in store, a Huguenot colony started by Gaspard de Coligny made preparations to sail for the New World for the purpose of founding a settlement where they could worship as they pleased. Coligny, although high in rank, had to act with great caution.

This Huguenot party may be considered as being political as well as religious. Their religious element consisted of martyrs and devoted fugitives, but joined to these were some on whom the faith sat lightly. Yet in this expedition were the boldest and most earnest of their sect—men equal, in every respect, to those who

later came over in the Mayflower and landed at Plymouth. Their commander was an excellent man and a staunch Protestant, Jean Ribaut of Dieppe. Besides sailors the expedition consisted of a band of veteran soldiers and a few nobles, for it must be noticed that also some of the nobility had withdrawn from the Established Church and become Protestants.

The party sailed from Hause on the 18th of February, 1562. After quite a successful voyage, on the thirtieth of May, in the latitude of twenty-nine and a half degrees, they sighted what proved to be the coast of Florida. Now they turned their prows northward and the next morning found themselves off the mouth of a great river. The shore was crowded with Indians who beckoned them

to land. They landed and gave thanks to God for their safe deliverance. Through the giving of gifts they soon made friends of the Indians. Next they took advantage of the opportunity and admired the scenery and the country which they imagined must have gold. Here again we find that old fault, that old greediness, which so often resulted in the utter failure of entire colonies, namely, the desire for gold. We shall soon see the result of this desire in this case.

When they had planted the arms of France on the shores of this river, which was called the river May, they again set sail for the north. After cruising for some time they cast anchor near Fernandina. Spending several weeks in explorations till they had a pretty clear conception of this vast region, they, one day,

discovered a commodious haven between the flat and sandy shores and called it Port Royal. Here too they made friends of the redskins. Plenty of game was seen and many of the men desired to remain. Although the object of this voyage was not immediate settlement, yet Ribaut humored them. Finally thirty were chosen to hold Port Royal with Albert de Pressia as commander. The fort was begun, situated on Archers Creek, and was called Charles Fort in honor of Charles IX. As considerable headway was soon made, ammunition was sent to the fort and Ribaut embarked on his way to France.

Albert and his friends were now alone in these solitudes, that is, they were the only Christian settlement from the North Pole to Mexico. The pressing question, in fact, was how were they to subsist, but

before considering this question they began to turn their attention to gold. After they had built the fort they set forth for adventures. They were not troubled, in any way, by the Indians who had lost all fear of the new comers since Ribaut had advised his men to use kindness, and so good will prevailed. The French roamed over the whole country, visited in turn five petty chiefs and feasted with each one. By one of these chiefs, named Andusta, they were invited to a religious festival, the whole affairs of which they were not allowed to see. At the close of the festival they were summoned to a sumptuous feast.

After their visit to Andusta, they again returned to Charles Fort and were again generously supplied by the Indians with food. The Indians, also, told them of an-

other rich tribe to which they immediately repaired. By this tribe they were feasted to repletion and were given a large amount of food to take back to their fort. However, that night their store house burned down and again they were left destitute. Again they received food from a rich Savannah tribe whose chief assured them that his friends should not want.

From all this one might think that the French spent a life of luxury and happiness but this was not the case. Within the colony the colonists fell to quarreling. The governor, Albert, grew harsh, domineering, and violent. Any one opposing him would get hung, he performing this office himself. After he had banished one man to a solitary island the colonists arose and murdered Albert and put another man in his office named Barre. After this

there was peace but a peace of famine, homesickness, and disgust. The settlers grew to hate the fort. If they had put energy in this settlement it might have become a solid colony but on the contrary they lost all energy. They built a rude craft, loaded a few provisions on it and took to sea, bound for France. A storm overtook them, their provisions gave out, and they were compelled to eat one of their own number. Finally an English bark took them all prisoners. Thus ended the first Huguenot attempt to establish a settlement in Florida.

Not more than two years later another French Huguenot fleet, driven by conditions in France, anchored off the River May on the coast of Florida. This fleet was commanded by René de Laudonnière, who also was of the nobility. All were

Huguenots in name at least, yet as before some of the product was unsound—soldiers paid out of the royal treasury, hired artisans and tradesmen, and a swarm of volunteers from the young Huguenot nobles. There were no tillers of the soil who are so badly needed in a colony. Huguenot tillers were rare, for the peasants clung blindly to the old faith. The settlers were heated with dreams of wealth like all others before. They arrived on the twenty-second of June, 1564, at St. Augustine, which they named the River of Dolphins. Thence they bore north and on the twenty-fifth landed on the shore of the River May near the present village of Mayport. They were also favorably received by the Indians, who followed them wherever they went.

The French explored the country

round about until they came to a hill, now called St. John's Bluff, where, after a good deal of debating, they started to build a fort. It was marked out in the form of a triangle and all lent a hand to finish it. The fort was after this manner. On the river side there was a defence of a palisade of timber. On the other two sides was a ditch and a rampart of earth. At each angle was a bastion and one held a magazine. In the open were several buildings for provisions and also some dwelling places. The Indians grew suspicious and came to inquire but Laudonnière explained that no evil was intended. He had made a treaty with them to attack the Thimagoas, a hostile tribe, and this he renewed. This reconciled the Indians and in several more days the fort was finished.

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At heart the French commander wished to make friends with the Thimagoas and accordingly sent one of his men to make a treaty. When the man returned he told the inquiring Satonriona that he had made an expedition against the Thimagoas and had defeated them. When the chief, in turn, wished to make an expedition against them the French refused to go. This angered the chief and he went alone. It was lucky for the colonists that his wrath did not take another turn, but on his return he again made a treaty with the colonists, now lowered in his esteem.

Meanwhile, in Fort Caroline itself, parties and cliques, conspiracy and sedition, were fast stirring into life. The colonists' hopes had been dashed for they found not conquest and gold but exile in a small fort with hard labor, hard fare,

approaching famine and nothing to break the monotony. They now formed plots against the commander. What largely angered them was that the commander had several favorites, one of whom was Othingy, and so they could not gain his ear. Even the young nobles were in this conspiracy, none of whom was very religious. The plot was led by one La Roquette, who stated that he had found a mine of gold and silver which would make them all rich and that were it not for Laudonnière their fortune was made. He gained an ally in a man named Genre and through him won over many soldiers. They now tried to kill the commander in every way but utterly failed, being detected each time. At length word was brought that Genre was the cause of all this and he was forced to flee but was

finally forgiven. Laudonnière had fallen ill and the plotters sent charges to France of peculation, favoritism, and tyranny. With a certain French captain Laudonnière exchanged eight malcontents for sailors, which act proved disastrous. These pirates, joined to others, made an expedition to the West Indies but were caught by the Spanish and were forced to say all they knew about the fort. Things now went on from bad to worse. The conspirators, led by a man of good birth by the name of Forneaux, killed all who opposed them. They captured Laudonnière, who had again fallen ill and threatened to kill him unless he would submit to their expedition against the West Indies. This he at last promised to do. Their object was to plunder a church rich with metal whereby a triple end was

achieved. First, a rich booty; second, vengeance on the enemies of their party and faith; third, the punishment of idolatry. Needless to say that their expedition, although successful in plundering the church, was a failure. They returned crestfallen and prayed for forgiveness. After some deliberation they were forgiven but the ringleaders were condemned to death.

The fort was next assaulted by famine brought on by indolence. All their stores failed and they were obliged to eat even roots. The Indians no longer rendered aid except at times selling them fish at exorbitant prices. No help came from France. They demanded aid from an Indian chief, Ontina, and were refused. Upon this they captured him and asked for ransom. At first none was given but

finally they made the chief promise food and took him back to his tribe. Here they received but a meager supply and moreover the party was attacked by the furious tribe, two being killed and twenty-two injured. Now famine and desperation reigned full sway at the fort and the colonists were about to leave when four ships were sighted. The question was, Were they friends or enemies? They were neither, but English in quest of slaves commanded by the father of slavery, Sir John Hawkins. He came up the river and landed at the fort. Seeing their condition he offered them free passage in his vessel which was refused for obvious reasons. He next offered to lend or sell one of his smaller vessels. This Laudonnière done and Hawkins liberally told him to fix his own price. The cannon of the fort

and several other articles now useless to the settlers was given in exchange. Hawkins also gave wine and biscuit together with other needed provisions for the voyage, after which he left.

The French settlers now began to make preparations for departure when their misfortunes took a new phase. On the 28th of August, Vassem and Verdier came in with the news that a squadron was nearing. As this fleet did not answer the signals it was thought an enemy. Word was about to be given to fire when it was discovered to be a French fleet under Ribaut. Their joy knew no bounds. Ribaut brought new settlers, both men and women. Their joy was short, for soon they saw a Spanish fleet on the horizon.

This Spanish fleet was led by Menen-

dez, who anchored for the night. Ribaut's fleet escaped under cover of darkness. Next day Menendez arranged to attack the French. With five hundred men, guided by a renegade Frenchman, they attacked the French unawares and unprepared. Menendez was merciless and killed all he met. However, some few managed to escape, among whom were La Moyne, Laudonnière, and some others. These were picked up along the coast by a French vessel and taken safely to France.

Another butchery was near at hand. Word was brought to the Spanish by the Indians that a French fleet had been sighted on the coast toward the south about five or six leagues off. Menendez immediately began to reconnoiter and soon saw the bivouac fires of the ship-

wrecked French who endeavored to reach Fort Caroline whose fate was not yet known. Ribaut was farther south struggling for the same goal. Of the first parties' fate there is no French record. Menendez here showed his treachery. He made believe he was friendly. He put on the clothes of a sailor, rowed to the French and asked who they were. He was answered:

"Followers of Ribaut, Viceroy of the King of France."

Menendez asked, "Catholics or Lutherans?"

"All Lutherans," was the reply.

The French then asked for assistance and Menendez gave his word of honor for their safety, sending a boat to bring them over. On landing he met them very courteously. He kept his followers at a dis-

tance in order to exaggerate their strength since his number was not more than sixty while the French numbered about two hundred. They asked for the loan of a boat and were again asked whether they were Catholics or Lutherans. Menendez then revealed the fort to be taken, upon which the French asked for vessels to take them home. Menendez said that only if they were Catholics would he do this, to Lutherans, never. Right here in order to show how the Huguenots were despised it may be well to insert the harangue of Menendez, who hated them with utter contempt.

"All Catholics I will be friend but as you are of the New Sect I hold you as enemies and wage deadly war against you; and this I will do with all cruelty in this country where I command as Vice-

roy and Captain General for my king. I am here to plant the Holy Gospel that the Indians may be enlightened and come to the knowledge of the Holy Catholic faith of our Lord Jesus Christ as the Roman Church teaches us. If you will give up your arms and banner and place yourselves at my mercy you may do so and I will act towards you as God shall give me grace. Do as you will, for other than this you cannot have—neither truce nor friendship."

The French after vain attempts to save their lives surrendered to the Spanish. They were taken in groups of ten and had their hands tied behind their backs and then were tortured by the Spanish with their harangue. After this they were led to a lonely place, where a line was marked on the sand behind which the French were

placed. Now the Spanish began their work of butchery. None was left to tell the story.

Several days later Ribaut and his shipwrecked crew were discovered. Menendez and his men showed themselves. whereupon the French formed battle array. The Spanish, however, kept cool and showed no desire for battle. This had the desired effect. The French blew a trumpet of parley, after which they came over to the Spanish and asked for aid. Menendez treated them well and promised them safety. He gave them a good meal, after which the French asked for their lives. Ribaut, it is said, promised one hundred thousand ducats for those who would surrender. The Spanish leader considered this proposition during the night but in the morning ordered the

French to be brought over in tens, then he tied their hands behind their backs and led them behind the same ridge where the others had been killed. Some, however, had escaped during the night but those that had surrendered, together with Ribaut, were placed in line. Again they were asked what their religion was and Ribaut answered:

"I and all here are of the Reformed faith."

Upon this the signal was given and only two lads were saved out of the whole lot.

As to those of Ribaut's party who had escaped, word was brought to Menendez, soon after, that they were seen entrenching themselves at Fort Caroline. He set out with a force of some two hundred and fifty and upon his reaching the

fort the French fled panic stricken. He sent his trumpeters to summon them and pledged his honor for their safety. Some surrendered, others would sooner be eaten by the savages than believe anything of Menendez. This time Menendez kept his word. He treated the prisoners kindly and allowed them to eat at his own table. It is true that some of them turned Catholics. Thus ended the second French settlement in Florida.

We have now glanced rapidly over the early French Huguenot settlements in Florida and have observed their doings and their fates. Their unsuccess was due: partly to the French themselves, because they, as in all other colonies, had some among them who were malcontents; chiefly, however, to the Spanish under Menendez, who destroyed early French Protest-

antism in America. Had not the Spanish interfered the Huguenots doubtless would have succeeded in their efforts since they were on a fair road to success when the Spanish swept down on them. As it was, the fates were against the new born · faith of the French and so their project came to naught. These settlements. although slighted, are in every whit as important and interesting, although unsuccessful, as were those of the Puritans later Had better fortune attended them and had they not been moved by that greedy desire for gold but had put all their life and soul into the colony, who can say what would have been their accomplishments? This question will forever remain unanswered.

TREES AS A MEANS FOR BEAU-TIFYING OUR CITIES



TREES AS A MEANS FOR BEAU-TIFYING OUR CITIES

states taken any steps in caring for our forests and although the progress made in this line is of necessity comparatively slow it is sure to make important advances in the near future. The time is rapidly approaching, and it cannot come too soon, when the states will not only control most of our forest land and care for it but measures will also be taken for the preservation and protection of trees in our cities and smaller towns; that is, where measures along this line have not already been taken by the cities and towns themselves.

Nothing looks more dreary, dirty, and unhomelike than a city whose streets and vacant spots are treeless. One may well liken such a city to a desert, and indeed on a hot mid-summer's day it is much worse than a desert, dry, dirty, and sweltering, with nothing to check the beating rays of the sun except, in an unsatisfactory degree, the shade of the various buildings. Alas for such a city. Its occupants are indeed to be pitied both on account of their condition and their ignorance: the former because they are obliged to live in such a place; the latter because they have not realized before the fact that with but little work they could ease their lot by planting fast growing shade trees. The inhabitants of such a city may nearly always be classed with the shiftless and unambitious. Let us now consider how

trees beautify a city, the kind of trees that should be preferred, and the care which should be given.

In the first place let us observe the functions of a tree in a city. Its purposes are, shall we say, above all for the comfort of the pedestrians. Possibly we all have experienced walking along an unshaded street in a large city with the temperature above 100 degrees Fahrenheit and the only cooling thing in sight, possibly, a soda fountain. If we have we can all know the thrill of joy which passed through us upon our beholding a nice and cool shade tree in the distance and despite the heat rush for the spot. How much pleasanter if such trees were planted all along the street, both for the people living there, and for the people obliged to do the traveling. In the second place it improves the looks of the city, rendering it more beautiful as we all know full well. No matter what fine residences a town may have; no matter how many monuments or obelisks built of the finest granite, if minus a number of shade trees it does not beautify the situation.

In the choice of trees care should be taken in picking those which will produce the best of shade and at the same time make the least bit of work and put on the finest appearance in their growth. Since the main purpose in planting is for shade no slow growing trees should be picked. Not any and every kind of a tree should be planted in any haphazard way. The selection should be made from the stock of a high grade nursery. These give the best results and reward for the labor put into them. The best trees for

shade in a town are possibly found among the Elms, either the American or the Slippery; among the Maples, and of these probably the finest is the Silver and it is the one which is generally preferred, the Norway, the Red, and even the Sugar, makes an excellent shade tree; the Box Elder also makes a satisfactory shade tree. For merely decorating purposes the choice should lie among the Willows and the different kind of Evergreens. The Oak also makes a fairly good shade tree but its method of growth is against its being planted on a street. An Oak tree should be planted in the open, where it has plenty of room to throw out its branches. Where the Oaks should be set out in a city and where they would give the most beautifying appearance is on a triangular plot formed usually where two

streets come together. Some people think that the Oak is too large to make a good appearance but I think this is a mistake. A town should have at least a couple of trees in it which put on a stately appearance. Of all trees the Oak is the most stately and there is most assuredly nothing feminine about its appearance. Many people carelessly admire a tree's beauty and appreciate its shade, and, of course, its latent possibilities as timber; but how few of those who have seen the ease with which a great tree is felled realize the wonder of its growth, the years and change that went into its making, and the years and change required before another like it can take its place! In the Autocrat Dr. Holmes speaks of a man, with bitterness, who "labored under the delusion that human life is under all cir-

cumstances to be preferred to vegetable existence" and needlessly had a great tree cut down. "It is so easy to say 'It is only a Poplar' and so much harder to replace its living cone than to build a granite obelisk."

A tree which has seen one hundred years we call a patriarch; and indeed few trees about our great cities live to that time, which in an Oak and Elm should be a stout and hearty middle age, the very prime of life. Of late, it is true, the people seem to be awakening to the value of these historic witnesses, and are doing what they can to preserve the few scarred relics which we have left. Did I say historic witnesses? An old and stately Oak certainly brings to mind at least a few historic events. Whenever I behold an ancient-looking Oak I am carried several

centuries back to the time when the Red Men were roaming over this country of ours; to the time of the Revolution and before, and I think to myself, "If that tree could speak I wonder what would it say."

As to the arrangement of trees in a city nothing is so important. Great care should be taken in the setting of trees. They should not be planted in a crowded appearance, ample space should be granted them for their growth. The planter should bear in mind the fact that sunlight is the essential thing needed by a growing tree in order that it can put on an ideal appearance. They should not be planted in a tenement sort of appearance. A space of from twenty-five to about forty feet should be allowed between each tree to secure the best of results. They

should be planted in a symmetrical order, by this I mean that they should not be planted out of line or order. But the planting is not all. After this great care should be taken of the tree. Many people make the mistake in thinking that after planting nature will do the rest. Not so. Although this is true in some cases it is not so in the majority of cases. There are enemies to be watched and guarded against which the young tree cannot ward of alone and it needs the help of mankind to do this. It is something like a child in this respect. After it has started to grow and after several years of growth useless branches should be cut off, by this I do not mean topping but more of this later on. I mean branches too near the ground and possibly dead branches. The enemies common to young

trees are insects and animals.

Again many people believe that in order to produce good shade a tree should be topped. This is erroneous. In the first place it spoils the shape of the tree and makes it put on a scrubby and crippled appearance. Sooner than have trees topped have none at all; that is, so far as looks are concerned. In my estimation there is no excuse for topping a tree unless it be for the purpose of preventing it from coming in contact with electric wires. However, in a well built town the wires should not run through the principal streets, they should be taken along alleys and back streets. Telephone and Telegraph companies should realize this and in most places they do so realize. If the wires cannot be taken down side streets they should be taken underground,

which is being done in a few of our well-sized cities.

Trees also are very good dust checkers. It is a well-known fact that trees catch and retain the moisture; however, it is not known for certain whether trees increase the rainfall, although some authorities claim that they do. By checking the dust they prevent the spread of disease since the disease germs are carried on the dust particles. They maintain a more uniform degree of humidity in the atmosphere; if they do not augment the amount of precipitation they equalize the amount of precipitation and its distribution throughout the season.

The tree also affords protection against the prevailing winds and for this the Evergreens are by far the most effective. Take for instance small towns and cities in the

west which are subject to strong tornadoes and hurricanes. Much damage is done to these towns when one of these winds makes its appearance. This could all be prevented by merely planting a number of Evergreens on that side of the town where the prevailing winds are the strongest, which would act as a check and the damage would be reduced to a minimum.

In order to beautify a city the trees should not only be scattered along the streets but also the vacant spots and the banks of streams should be planted with them. These spots should be set out with trees suited there. They should be mixed. On vacant lots Oaks, Willows and the different kinds of Evergreens and Maple do very well. While along the banks of streams Lombardy Poplars and Willows

help to beautify the scene, and of the Willows the one which produces the most beautiful effect is the Weeping Willow. It is well known that they prefer moist soils and can be propagated with but little work. All that needs to be done is to cut off a small twig and place it in moist soil and within a very short time a tree of good size and beauty will occupy its place. Also Evergreens can be planted here and produce excellent results. However, the Evergreens will have to be protected in the first couple of years of growth. the first place they must have a shaded spot to start their growth and also be protected from mud, and secondly they must be protected from an insect called the weevil during its early growth which bores its way into the branches, either killing them or making them put on a stunted